What is a Rip Current?

Rip current at Carolina Beach, NC on Sept. 11, 2001. Picture courtesy of Carolina Beach Police Department.

A rip current is a strong but narrow current flowing away from the beach. Rip currents can occur any time of the day or year, but are strong under certain tidal, atmospheric and oceanographic conditions. Rip currents are not unique to North Carolina or even the United States East Coast. They can form at any beach with breaking waves, including the beaches along the Great Lakes. The speeds within a rip current can exceed 6 mph, which is as fast as an Olympic swimmer! This is one reason why they can be dangerous.

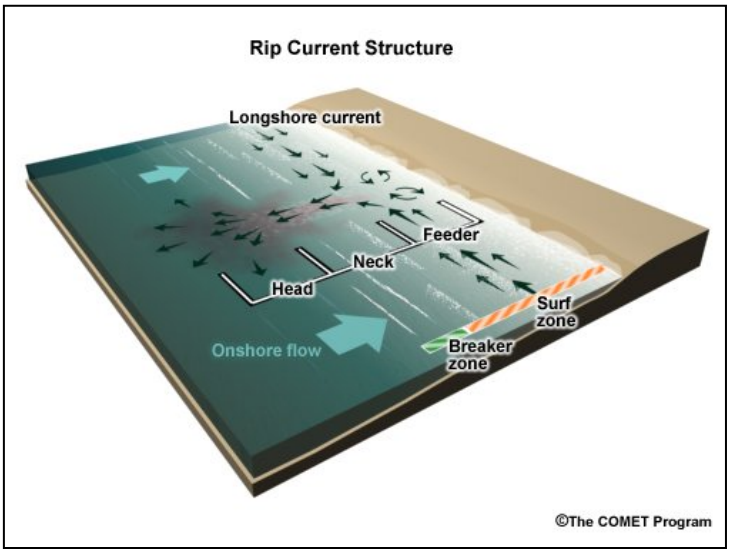
A long swim back…

Some of the strongest rip currents can extend off the coast the length of a football field (100 yards)! A swimmer who rides a rip current to the sandbar can find they have a long swim back to the beach.

AP - Michael Phelps

There are three parts to a rip current: **feeder** (one or two of them), **neck**, and **head**. The **Feeder** portion is where the part of the current that feeds into the rip current. Some rip currents have one feeder, but they can have two.

The **Neck** is the strongest part of a rip current and as a result is the most dangerous part. Speeds within the current may be fast enough to pull swimmers away from the beach very quickly. In fact, this is the portion of the rip current where speeds can exceed 6 mph. The width of the neck is typically 30 feet or less.



The final part of a rip current is called the head. The feeders flow into the neck and the current in the neck weakens in the head are. In the head, a rip current spreads outward and dissipates. People who get out in this portion of the rip current find they have a long way to swim back to shore!